Question	AT&T's Data Request	Verizon's Response
AT&T 3-44	When Verizon processes a loop qualification transaction, (A) What specific information does Verizon return to the carrier requesting the loop qualification;	(A) The specific information returned by Verizon to the carrier requesting the loop qualification depends on the loop qualification tool used by the CLEC. If a mechanized database is utilized, then loop length, Y/N, presence of DLC, DAMLs, loads and spectrum interferers information is returned. If a manual loop qualification is utilized, then loop length, Y/N, presence of DLC, DAMLs, loads and spectrum interferers information is returned. If an engineering query is utilized, then loop length, presence of DLC, DAMLs, loads (number & location), bridged tap (number & location), gauge is returned.
	(B) Does Verizon, in any way, advise the carrier submitting the loop qualification request whether or not a particular DSL will operate satisfactorily? If so, upon what information does Verizon base this judgment?	(B) No.
	(C) Must a carrier identify the nature of the DSL service it intends to provide over a particular loop; if so, how and when in the pre-ordering/ordering process is the information conveyed?	(C) Yes. Per the requirements of the December 1999 Line Sharing Order, xDSL loops are ordered via NC/NCI codes, which designate the particular type of DSL ordered
AT&T 3-45	State the trouble rate for local service loops employed in line sharing for cases where the CLEC did qualify or re-qualify loops? When reporting this result, please provide all detail that is necessary to draw a conclusion whether the difference, if any, is statistically different at varying levels of statistical confidence. Also, please identify the time frame, geographic scope of the service area and number of different carriers represented within the data. If Verizon cannot provide such information, describe the basis upon which it draws the conclusion that if CLECs do not pre-qualify loops, "it will receive unnecessary trouble reports, causing Verizon to operate in an inefficient manner?	Verizon does not maintain trouble rates that show whether a CLEC has qualified or re-qualified loops.

Question	AT&T's Data Request	Verizon's Response
AT&T 3-47	If a CLEC uses an alternate loop qualification tool (e.g., from a vendor such as Telcordia), would Verizon accept line splitting orders from that CLEC without requiting that Verizon also perform a loop qualification? (A) If yes, would the CLEC be required to submit any information to Verizon regarding the results of that carrier's qualification of the loop? (B) If information is required from the carrier, what will Verizon require that the carrier supply and how would the information be provided. (C) If Verizon requires that it perform a loop qualification, despite the CLEC performing its loop qualification, why does Verizon believe it needs to perform the re-qualification and what charges, if any, would apply for the re-qualification?	No. Verizon requires CLECs to use Verizon's own pre qualification tools. (A) n/a (B) n/a (C) As to why Verizon requires a CLEC to use Verizon's pre qualification tools, see response to request 42(A). A mechanized or manual pre qualification charge would apply.
AT&T 3-49	Does Verizon assert that AT&T, having established collocation space, may not place splitters in such collocation space? If so, what limitations does Verizon assert it may place on CLECs' decisions regarding where to place splitters within its collocation?	No. AT&T has the option of placing splitter equipment in their own collocation space.

ATTACHMENT 1

11.4.1.5.1 Until modified by Commission Order, Verizon may impose limitations to the availability of unbundled local switching at TELRIC prices as provided in paragraphs 11.4.1.5.2 through 11.4.1.5.11 of this Agreement. In the event that the federal Communications Commission modifies its rules governing Verizon's obligation to provide unbundled local switching at TELRIC rates subsequent to the approval of this agreement, paragraphs 11.4.1.5.2 through 11.4.1.5.11 shall be null and void and the pricing of unbundled local switching previously subject to the limitations shall revert to the TELRIC rates applicable to unbundled local switching not subject to the limitations, 30 days following effectiveness of the relevant FCC Order, unless, before that date, the parties agree to implement alternative language or submit the issue to binding arbitration.

ATTACHMENT 2

Exception to Verizon's Obligation to Provide Unbundled Local Switching at Total Element Long-Run Incremental Cost-Based Prices:

11.4.1.5.2. Upon not less than one hundred eighty (180) days written notice to AT&T, Verizon may elect not to provide unbundled Local Switching (as defined in 51.319(c)(1)) at total element long-run incremental cost-based prices under the circumstances set forth herein within any portion of a territory (each, an "Exception Territory") for which Verizon can demonstrate that, as of the date on which AT&T receives notice (the "Exception Notice Date"), EELs functionality that complies in full with all of the requirements set forth in this Agreement and under Applicable Law is available for ordering and installation by AT&T throughout such territory at cost-based prices as specified in Exhibit A of this Agreement without use restrictions of any kind, and in accordance with the timeliness and quality standards set forth in Section 26 (Performance Standards, Measurements, and Penalties) of this Agreement. A territory shall be eligible to be an "Exception Territory" if it constitutes the entire service area of Verizon in density zone 1 that is located within one of the top 50 Metropolitan Statistical Areas ("MSAs") and if all of the conditions in this Schedule are satisfied throughout such territory, even if Verizon chooses to make an election pursuant to this Schedule with respect to less than the entire Exception Territory. The density zone 1 designation is as determined by NECA Tariff No. 4, as in effect on January 1, 1999. The top 50 MSAs are those listed in Appendix B of the FCC Third Report and Order and Fourth Further Notice of Proposed Rulemaking in CC Docket No. 96-98. The offices that are eligible to include Exception Territories are listed in Appendix 2 to this Part IV.

11.4.1.5.3. For the purposes of the exception, "same physical location" shall be determined by AT&T based upon the following rule:

11.4.1.5.3.(a) Pre-existing combinations and orders for unbundled 2 wire analog loops, connected to the line side port of the unbundled local circuit switching elements that were scheduled for installation before the exception is effective pursuant to the above terms shall not be disrupted or discontinued by Verizon.

11.4.1.5.3.(b) To the extent a pre-existing customer account is consolidated at the retail customer's request and such consolidation would otherwise allow the exception to be applied, Verizon shall not limit AT&T's ability to use all unbundled network elements used to provide the retail service it offered prior to the consolidation.

11.4.1.5.3.(c) Upon Verizon's compliance with the requirements above, AT&T will certify that use a mutually agreeable ordering procedure (e.g., a separate USOC) to order the unbundled local switching element where market pricing of the unbundled local switching element. Such procedures shall take effect at the later 180 days following notice by Verizon as provided in 5.1.8.1 or 180 days after Verizon and AT&T agree to the ordering procedure within the state where the unbundled local switching exception is applicable.

11.4.1.5.4 Verizon may only exercise the election permitted under this Schedule with respect to the fourth and subsequent 2 wire unbundled Loops of Verizon that AT&T uses in combination with Local Switching to provide retail local voice service to a single end user customer account name, at a single physical customer location (including a single tenant building or a single unit within a multiple dwelling unit or other multiple tenant environment). Upon request from Verizon, AT&T shall certify that the foregoing requirements do not apply to any specific facility. For the purposes of applying the exception, a "customer" shall be determined by AT&T based upon the following rule: Only two-wire analog loops unbundled loop obtained from Verizon will be counted. If such unbundled loops used by AT&T terminate at the same physical location but are billed to different retail customers of AT&T the loops will be separately accumulated for purposes of determining whether the exception may be applied. In determining whether Verizon may exercise this election in any particular case, AT&T shall not be obligated to disclose retail account detail for its customers, such as customer name or address, beyond that which is otherwise required under mutually agreeable implementation of industry standard ordering provisions.

11.4.1.5.5 Existing combinations and orders for 2 wire voice grade Loops connected to the line side port of the unbundled Local Switching elements that were installed or ordered (separately or in combination) before the date that is one hundred eighty (180) days after the Exception Notice Date (including orders placed before the end of such 180-day period and provisioned after the end of such 180-day period) shall be provided by Verizon at total element long-run incremental cost-based prices set forth in Exhibit A of this Agreement until such time as AT&T issues an order to disconnect the Network Elements, notwithstanding any consolidation of customer accounts or other modification in the servicing arrangement by AT&T. In no event shall Verizon under any circumstances disrupt or discontinue the provision of, or fail to provision, Local Switching under this Agreement.

11.4.1.5.6 In the event that AT&T orders Local Switching in excess of limitations applied by Verizon pursuant to this Schedule, Verizon's sole recourse shall be to charge AT&T a rate to be negotiated for use of the

Local Switching functionality for the affected facilities, or in the alternative to charge AT&T the Local Services Resale rate for use of all Network Elements and associated services used to provide the affected facilities to the AT&T Customer. In such cases, AT&T shall designate which facilities are being purchased at total element long-run incremental cost-based prices set forth in Exhibit A of this Agreement and which facilities are being purchased at pricing provided in this Section 4.

11.4.1.5.7 Notwithstanding the provisions set forth above, Verizon shall always provide Local Switching at total element long-run incremental cost-based prices set forth in Exhibit A of this Agreement if line side port functionality is not required. Nothing in this Schedule shall be construed to limit in any manner Verizon 's obligation to provide unbundled Shared Transport at total element long-run incremental cost-based prices throughout its service area for use by AT&T in serving any AT&T customer in any quantity, including in situations where Verizon is not required to provide unbundled Local Switching at total element long-run incremental cost-based prices.

11.4.1.5.8 Nothing herein shall preclude AT&T from using its own facilities, resold services, or any other facilities, services or serving arrangements to provide additional services, in any quantity, to an end user customer account with respect to which Verizon may exercise this election.

11.4.1.5.9 All disputes arising under these provisions shall be resolved according to the Dispute Resolution process set forth in Section 28.11 of this Agreement.

11.4.1.5.10 Nothing herein shall be deemed to relieve Verizon of its obligation to provide unbundled Local Switching as a condition to meeting the requirements of Section 271(c)(2)(B)(vi) of the Act.

11.4.1.5.11 Verizon shall not impose any restrictions on AT&T regarding the use of the unbundled Local Switching it purchases from Verizon provided such use does not result in demonstrable harm to either the Verizon network or personnel.

ATTACHMENT 3

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matters of	)	
	)	
Deployment of Wireline Services Offering Advanced Telecommunications Capability	)	CC Docket No. 98-147
	)	
and	)	
	)	
Implementation of the Local Competition Provisions in the Telecommunications Act of 1996	)	CC Docket No. 96-98

COMMENTS OF AT&T CORP.

Pursuant to the Commission's Public Notice, DA 00-2036, released September 6, 2000, AT&T Corp. ("AT&T") submits these comments in response to the Commission's Second Further Notice of Proposed Rulemaking in CC Docket No. 98-147 and Fifth Further Notice of Proposed Rulemaking in CC Docket No. 96-98 ("FNPRM").

The Commission has the opportunity in these remand proceedings to undertake a thorough review of its collocation policies and to establish rules that clarify the full extent of the incumbent LECs' duties under Section 251(c)(6). Congress understood that collocation is vitally important to the ability of new entrants to compete using interconnection or access to unbundled network elements, and expressly provided in Section 251(c)(6) that incumbents have a duty to provide collocation of equipment necessary for interconnection and access to unbundled network elements on terms that are just, reasonable and nondiscriminatory. 47 U.S.C. § 251(c)(6). The Commission implemented Section 251(c)(6) in its *Local Competition* and *Collocation Orders*, and made clear that incumbents were required to permit collocation of equipment that was in any way used for either interconnection or access to unbundled elements.

The D.C. Circuit remanded the Commission's determinations on a very narrow ground. The Court found that the Commission's previous orders had not adequately established a limiting principle, and that the "literal terms" of its orders could be read to permit collocation of potentially *any* functionality, no matter how unrelated to interconnection or access to unbundled network elements. *GTE Service Corp.* v. *FCC*, 205 F.3d 416, 422-25 (D.C. Cir. 2000). The Court did *not* question, however, the Commission's authority to order collocation of any specific telecommunications functionalities, such as optical terminating equipment, multiplexers, DSLAMs, routers, ATM multiplexers, remote switch modules, or any other equipment that new entrants typically collocate. Rather, the Court merely remanded the matter to the Commission to permit the Commission to reconsider its "impermissibly broad" interpretation of Section 251(c)(6).

On remand, the Commission should now recognize that the terms of Section 251(c)(6) establish three important principles that define the scope of new entrants' rights to collocate equipment on incumbent LECs' premises. Part I below shows that, first, incumbent LECs' Section 251(c)(6) duties go beyond mere physical connections to the incumbent's network, because the Commission has always defined the statutory terms "interconnection" and "access" to unbundled network elements more broadly. Second, although the term "necessary" does not need to be interpreted this restrictively, at a minimum, the term at least encompasses situations in which, absent the ability to collocate particular equipment, (i) new entrants would be precluded from providing at least some services to at least some customers through the use of unbundled network elements or interconnection, or (ii) the new entrant could not offer service of the same quality as the incumbent through the use of unbundled network elements or interconnection. Under either of those circumstances, the subject equipment is "necessary" for

interconnection and access to unbundled elements under any plausible definition of the term. And third, Section 251(c)(6) requires that collocation must be available on terms and conditions that are "just, reasonable, and nondiscriminatory," which means that where equipment has functionalities and capabilities that are necessary for interconnection or access to unbundled network elements, the statute prohibits incumbents from denying collocation of additional functionalities in multifunctional equipment that does not consume any appreciable additional space in the central office.

Under these standards, the Commission should adopt national rules requiring incumbent LECs to permit collocation of transmission and switching functionality. First, equipment performing transmission functions is "necessary," under any definition of that term, for interconnection or access to unbundled network elements, because the only available alternative to collocating such equipment would be to deploy copper pairs for interoffice transport facilities, which would be prohibitively expensive and would preclude competition. Second, incumbents must also permit collocation of equipment that performs switch functions, including remote switch modules and packet switches. Collocation of switch functions is necessary because it allows new entrants to use scarce transmission resources more efficiently, and denial of the right to collocate such equipment would be discriminatory because switch equipment also performs transmission functions while consuming no more (or even less) space than comparable transmission-only equipment.

The Commission should also adapt its local competition rules to the changes that are occurring in technology and the market. As discussed in Part II.A below and in greater detail in the attached Declaration of Joseph Riolo, technological changes are underway in the loop plant that mirror to some degree changes that have already occurred for interoffice facilities. As

incumbents implement these changes in their loop plant, Part II.B shows that they hold quite new and significant implications for competition. Part II.C demonstrates, however, that these changes do not – and cannot – alter the basic function of a loop or competitive LECs' fundamental need for access to their customers. As shown in Part II.D, the incumbents' introduction of new loop architecture provides no legal or policy basis for the Commission to contract its current definition of the local loop, which defines that element to include "attached electronics."

The Commission's rules limiting competitive LECs' access to packet switching are also directly related to the new loop architecture. As shown in Part II.E, those rules already recognize that access to "spare copper" loops is not a viable substitute for access to the entire capability of a loop that is provided through use of next generation architecture. Further, a review of the facts concerning the architecture and economics of remote terminals (Part II.F) shows that collocation at such disparate remote points is virtually always infeasible for competitive LECs. Moreover, for the reasons explained in Part II.G, the Commission's rules should be modified to recognize that DSLAM functionality – especially when deployed in a remote terminal loop architecture – performs only a multiplexing (*i.e.*, transmission enhancing rather than packet switching) function and therefore should also be included within the definition of the loop. Finally, Part II.H explains why the Commission's rules must assure that incumbents must not discriminate between affiliates and nonaffiliates in planning changes in their loop architectures and that competitors have appropriate access to information about incumbents' proposed changes to their loop plant.

Finally, as shown in Part III below, the Commission should adopt national rules governing space provisioning and reservation policies modeled on rules adopted by the states.

I. THE COMMISSION SHOULD ADOPT NATIONAL RULES UNDER SECTION 251(C)(6) THAT REQUIRE INCUMBENT LECS TO PROVIDE COLLOCATION OF EQUIPMENT THAT PERFORMS TRANSMISSION AND SWITCHING FUNCTIONS.

Collocation is essential to most facilities-based local competition. Congress recognized that it would be impossible for new entrants to provide most facilities-based services without the ability to collocate their own facilities in the incumbent LEC's central office in close proximity to the incumbent's switches and loops. In the wake of the D.C. Circuit's remand in *GTE Service Corp.*, it is now more important than ever for the Commission to establish national rules that clarify new entrants' rights to collocate equipment that performs transmission and switching functionalities. As the history of these proceedings makes abundantly clear, incumbent LECs have demonstrated the ability to impede competitive entry by insisting on unreasonable restrictions on collocation, and therefore the Commission should establish clear and comprehensive standards to prevent unnecessary disputes and delay. *Cf. Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd. 15499 (¶ 55) (1996) ("*Local Competition Order*") ("[n]egotiations between incumbent LECs and new entrants are not analogous to traditional commercial negotiations" and "incumbent LECs have strong incentives to resist [their statutory] obligations"); *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, 14 FCC Rcd. 4761 (¶ 29) (1999) ("*Collocation Order*") (noting ILEC opposition to collocation of functionalities related to advanced services as an "obstacle to competition").

A. The D.C. Circuit Held Merely That the "Literal Terms" Of The Commission's Previous Orders Were "Impermissibly Broad" Because They Contained No Limiting Principle And Could Be Read To Permit The Collocation Of Any Functionality.

The Commission has consistently recognized that the ability to physically collocate transmission and switching functionalities is necessary to offer local

telecommunications services in competition with incumbent LECs. While the D.C. Circuit rejected the Commission's broad interpretation of the term "necessary" in Section 251(c)(6), the Court did *not* question the Commission's more specific conclusions that the statute requires incumbent LECs to permit collocation of particular functionalities, such as optical terminating equipment, multiplexers, and even remote switch modules. The Court held merely that the Commission's previous orders failed to establish a limiting principle and thus could be read to require the incumbents potentially to permit the collocation of *any* functionality, no matter how unrelated to interconnection or access to unbundled network elements. *See GTE Service Corp.*, 205 F.3d at 423-25.

Congress recognized that physical collocation is centrally important to the ability of new entrants to offer competitive services, and therefore when it enacted the Telecommunications Act of 1996 (the "1996 Act"), Congress "completely revamped the statutory landscape by providing explicit congressional authorization for physical collocation." *GTE Service Corp.*, 205 F.3d at 419. In the 1996 Act, Congress adopted a new national policy of promoting competition in all telecommunications markets, and in so doing Congress imposed by statute a broad duty to provide physical collocation of equipment necessary to achieve the full range of competitive entry.[1] The new Section 251(c)(6) expressly requires incumbent LECs to

[1] The Commission had first ordered physical collocation in 1992 to permit competitive access providers ("CAPs") to use a combination of CAP and ILEC facilities to provide interstate special access services in competition with the incumbents. *Expanded Interconnection with Local Telephone Company Facilities*, Report and Order and Notice of Proposed Rulemaking, 7 FCC Rcd. 7369, 7413 (¶ 93) (1992) ("*Expanded Interconnection Order*") (adopting rules requiring Tier 1 incumbent LECs to permit collocation of transmission facilities, including "optical terminating equipment and multiplexers," to provide special access). From the beginning, the incumbent LECs have uniformly opposed physical collocation, and they sought review of the Commission's original rules in the D.C. Circuit. On review, the D.C. Circuit found that Section 201(a) of the Communications Act did not authorize the Commission to order physical collocation. *Bell Atlantic Tel. Cos.* v. *FCC*, 24 F.3d 1441, 1445-46 (D.C. Cir. 1994).

"provide, on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, for physical collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carrier." 47 U.S.C. § 251(c)(6).

The Commission first adopted rules implementing Section 251(c)(6) in its *Local Competition Order*. *See Local Competition Order* at ¶¶ 579-82. In that order, the Commission interpreted the term "necessary" in Section 251(c)(6) to mean "used" or "useful," and thus promulgated a rule requiring physical collocation "of equipment used for interconnection or access to unbundled network elements." *See id.* ¶ 579 (adopting 47 C.F.R. § 51.323(b)). Since 1996, however, incumbent LECs have aggressively opposed physical collocation of many specific types of equipment, and new entrants have been forced to litigate such disputes throughout the country in order to exercise their rights under Section 251(c)(6). *See, e.g., MCI Telecommunications Corp.* v. *U S WEST*, 204 F.3d 1262 (9th Cir. 2000) (upholding right of new entrants to collocate remote switch modules); *AT&T Communications of Virginia, Inc.* v. *Bell Atlantic-Virginia, Inc.*, 197 F.3d 663 (4th Cir. 1999) (same). In 1999, the Commission noted the widespread unwillingness on the part of incumbents to permit collocation and issued an order clarifying that its rules required incumbent LECs to permit collocation of DSLAMs, routers, ATM multiplexers, remote switch modules, and any other multi-functional equipment that was in some way used for interconnection or access to unbundled network elements. *See Collocation Order* ¶¶ 26-31.[2]

[2] The Commission specifically concluded that these clarifications were "particularly important given the rapid pace of technological change in the telecommunications equipment marketplace," and it found that "[i]n order to compete effectively in the advanced services marketplace, competitive telecommunications providers must be permitted to collocate integrated equipment that . . . increases the services they can offer their customers." *Id.* ¶ 29.

The incumbents responded by again seeking review in the D.C. Circuit. The Court held that the Commission's interpretation of "necessary" to mean "used or useful" was "impermissibly broad." *GTE Service Corp.*, 205 F.3d at 424. Specifically, the Court held that "the Collocation Order *as presently written* seems overly broad and disconnected from the statutory purpose enunciated in § 251(c)(6)," because the order would potentially require the collocation of *any* functionality, no matter how unrelated to interconnection or access to unbundled network elements. *Id.* at 422 (emphasis added). As an example, the Court noted that the order would require an incumbent LEC to "afford collocation of a competitor's equipment that included unnecessary multi-purpose features, such as enhancements that might facilitate payroll or data collection features." *Id.* at 424. The Court was concerned that, although "collocation on such broad terms would not really square with the terms of § 251(c)(6)," the "*literal terms*" of the order "seem to embrace any and all equipment that is otherwise necessary without regard to whether such equipment *unnecessarily* 'includes . . . other functionalities.'" *Id.* (quoting *Collocation Order* ¶ 28) (emphasis added). In addition, the Court found that the Commission's justification of the rule on grounds of "presumed cost savings" was inconsistent with the Supreme Court's interpretation of the term "necessary" in Section 251(d)(2)(A). *See id.* at 424 (quoting *AT&T Corp.* v. *Iowa Utils. Bd.*, 525 U.S. 366, 389-90 (1999) ("the Commission's assumption that *any* increase in cost (or decrease in quality) imposed by denial of a network element renders access to that element 'necessary' . . . is simply not in accord with the ordinary and fair meaning of [the statute's] terms")) (emphasis added).

Accordingly, the Court remanded the case to the Commission for further consideration. The Court emphasized that it did "not mean to vacate the Collocation Order to the extent that it merely requires LECs to provide collocation of competitors' equipment that is

directly related to and thus necessary, required, or indispensable to interconnection or access to unbundled network elements." *Id.* at 424. Indeed, the Court did *not* question the Commission's authority to order collocation of any specific telecommunications functionalities, such as optical terminating equipment, multiplexers, DSLAMs, routers, ATM multiplexers, remote switch modules, or any other equipment that new entrants typically collocate. The Court held simply that the Commission's previous rule, to the extent that its "literal terms" potentially required the collocation of *any* functionality, "ma[de] no sense in light of what the statute itself says." *Id.*

B. In Interpreting Section 251(c)(6), the Commission Should Recognize Three Important Principles.

On remand, the Commission now has the opportunity to respond to the Court's concerns and adopt national rules implementing Section 251(c)(6) that are more consistent with the statute as interpreted by the D.C. Circuit. In so doing, however, the Commission should acknowledge that when it originally adopted its broad interpretation of the term "necessary" in the very time-compressed local competition proceedings in 1996, it left other equally important aspects of Section 251(c)(6) unaddressed. Thus, the Commission has the opportunity in these remand proceedings not only to respond to the D.C. Circuit's concerns regarding its interpretation of the term "necessary," but to undertake a more thorough examination of Section 251(c)(6) and assure that its rules establish the full extent of the incumbent LECs' duties under the statute.

Accordingly, the Commission should now recognize that the terms of Section 251(c)(6) establish three important principles that define the scope of new entrants' rights to collocate equipment on incumbent LECs' premises. First, incumbent LECs' Section 251(c)(6) duties go beyond mere physical connections to the incumbent's network, because the Commission has always defined the statutory terms "interconnection" and "access" to unbundled

network elements more broadly. In particular, the Commission has made clear that "access" to unbundled network elements requires more than a mere physical connection to an element; it also requires that competitors must have the ability to "use" all of the features, functionalities, and capabilities of the element. Similarly, "interconnection" is defined in the statute as interconnection that is "equal in quality" to that which the incumbent provides to itself. This also requires more than a bare physical connection.

Second, although the term "necessary" does not need to be interpreted this restrictively, at a minimum, the term encompasses situations in which, absent the ability to collocate particular equipment, (i) new entrants would be precluded from providing at least some services to at least some customers through the use of unbundled network elements or interconnection, or (ii) the new entrant could not offer service of the same quality as the incumbent through the use of unbundled network elements or interconnection. Under either of those circumstances, the subject equipment is "necessary" for interconnection and access to unbundled elements under any plausible definition of the term.

Third, Section 251(c)(6) requires that collocation must be available on terms and conditions that are "just, reasonable, and nondiscriminatory." Thus, where equipment has functionalities and capabilities that are necessary for interconnection or access to unbundled network elements, the statute prohibits incumbents from denying collocation of additional functionalities in multifunctional equipment that does not consume any appreciable additional space in the central office. The only purpose of prohibiting the collocation of such additional functionality would be an anticompetitive one that would necessarily be unjust, unreasonable, and discriminatory.

1. Collocation of Equipment Necessary for "Access" to UNEs and "Interconnection." First, the term "necessary" in section 251(c)(6) must be placed in the context of the entire provision. Although the incumbents have repeatedly invoked the Supreme Court's treatment of the "necessary" and "impair" standards in *Iowa Utilities Board* to support their restrictive construction of the collocation duty, the incumbents' position is largely based on their demonstrably mistaken view of the scope of the statutory terms "interconnection" and "access." For example, throughout their briefs to the Court of Appeals, GTE and the other incumbent petitioners repeatedly substituted the term "connection," or its cognates, for the term "access."[3] Contrary to the incumbents' suggestion, the Commission has always interpreted those terms more broadly to encompass considerably more than mere "physical connections."

For example, the Commission squarely held in the *Local Competition Order* that "the term[] 'access' to network elements . . . mean[s] that incumbent LECs must provide the facility or functionality of a particular element to requesting carriers," and "further conclude[d] that a telecommunications carrier purchasing access to an unbundled network facility is entitled *to exclusive use* of that feature, function, or capability." *Local Competition Order* at ¶ 268 (emphasis added). Thus, the Commission properly, and expressly, rejected Pacific Bell's argument that the Act "does not require unbundled elements to be provisioned in a way that would make them useful." *Id.* Consistent with the statutory definition of "network element," the Commission has likewise repeatedly reaffirmed that a carrier that purchases "access" to an

[3] *See, e.g.,* Brief of Petitioners at 12 ("Section 251(c)(6) . . . is narrowly tailored to authorize a physical occupation of incumbent carriers' private property only insofar as 'necessary' to allow a competing carrier to connect its facilities with those of the incumbent"); 16 ("Under the FCC's new rules, therefore, a competitor may install . . . any piece of equipment . . . regardless of whether that equipment is used to perform functions other than interconnection").

element is entitled to *all* of the features, functions and capabilities of that element.[4] Moreover, the Commission's rules entitle competitors to such access in a manner that enables them "to provide any telecommunications service that can be offered by means of that network element." 47 C.F.R. § 51.307(c).

These interpretations were more than simply reasonable. They were compelled by the statute's terms and purposes, for if the term "access" meant simply "connection," an incumbent could satisfy its nondiscriminatory access obligation by permitting a requesting carrier to physically connect to an element even though the incumbent simultaneously prevented the requesting carrier from actually using that element's functionalities. To "access" an element is therefore to be able to "use" all of the capabilities of the element to provide a telecommunications service.

Therefore, as long as a particular functionality is required to make full use of a feature, function, or capability of an unbundled network element, the plain terms of the statute require that incumbents permit collocation of that functionality. For this reason, the precise construction of the term "necessary" is largely academic in the context of equipment with multiplexing, switching and other functionalities ordinarily employed in "using" a network element. In other words, requesting carriers have the right under the Act to collocate not only equipment that performs the narrow functions of termination and interconnection, but also multi-use equipment that is required in order to make *full* use of the element in question. For example, as explained more fully below, equipment that performs multiplexing, protocol conversion, and packet switching functions is "necessary," under any definition of that term, to make use of the

[4] *See, e.g., MCI Declaratory Petition Order*, FCC 00-139, ¶ 9; *Deployment of Wireline Services Offering Advanced Telecommunications Capability,* Third Report and Order and Fourth Report and Order, 14 FCC Rcd. 20912, ¶ 17 (1999) (*"Line Sharing Order"*).

full features and capabilities of the unbundled loop, which the Commission has defined to include high-capacity loops and loops conditioned to provide advanced services. *See Implementation of the Telecommunications Act of 1996,* Third Report and Order and Fourth Notice of Proposed Rulemaking, 15 FCC Rcd. 3696, ¶¶ 172-73, 176-77 (1999) (*"UNE Remand Order"*).

The Commission should also read Section 251(c)(6)'s duty to permit collocation of equipment necessary for "interconnection" in conjunction with Section 251(c)(2). Specifically, Section 251(c)(2)(C) expressly provides that the incumbent must provide interconnection that is "at least equal in quality to that provided by the [incumbent LEC] to itself or to any subsidiary, affiliate, or any other party to which the carrier provides interconnection." 47 U.S.C. § 251(c)(2)(C). In the *Local Competition Order*, the Commission confirmed that the incumbents must provide "interconnection" that is "equal in quality" to that available to the incumbent itself and that this obligation is "not limited to the quality perceived by end users." *Local Competition Order* ¶ 224.

The "quality" of the interconnection provided, however, cannot be separated from the equipment to be collocated. In other words, "equipment necessary for interconnection" is the equipment necessary to achieve interconnection that is equal in quality to that which the incumbent provides to itself or others. For this reason, the precise interpretation of the term "necessary" is again largely academic. Optical terminating equipment, multiplexers, and other supporting equipment that permits remote monitoring and maintenance functions, are all "necessary," under any definition of the term, to enable collocating carriers obtain the equal-in-quality interconnection required by Section 251(c)(2).[5]

[5] This standard would, of course, preclude collocation of non-telecommunications equipment, such as equipment performing "payroll" and "data collection" functions, because such equipment

2. The Interpretation of the Term "Necessary." Of course, the Commission must also respond specifically to the D.C. Circuit's concerns about the Commission's previous interpretation of the term "necessary." On remand, regardless of the precise definition of the statutory term "necessary," the Commission should conclude, at a minimum, that collocation of particular equipment that performs a particular telecommunications functionality is "necessary," if, without the right to collocate such equipment, (1) the cost of providing service would increase to the point that, in a significant number of cases, CLECs would not offer that service through interconnection or UNEs, or (2) CLECs would be unable to offer service through interconnection or UNEs that has the same quality as the incumbent's offering.

In *GTE Service Corp.*, the D.C. Circuit was concerned that the Commission's broad interpretation of "necessary" in Section 251(c)(6) was inconsistent with the Supreme Court's interpretation of the same term in Section 251(d)(2)(A). *See GTE Service Corp.*, 205 F.3d at 423-24; *Iowa Utils. Bd.*, 525 U.S. at 386-392. Section 251(d)(2)(A) provides "[i]n determining what network elements should be made available for purposes of [Section 251(c)(3)], the Commission shall consider, at a minimum, whether access to such network elements as are proprietary in nature is necessary." In *Iowa Utilities Board*, the Supreme Court held that what it termed "the Commission's assumption [in the *Local Competition Order*] that *any* increase in cost (or decrease in quality) imposed by denial of a network element renders access to that element 'necessary' . . . is simply not in accord with the ordinary and fair meaning of [the statute's] terms." *See Iowa Utils. Bd.* 525 U.S. at 389-390 & n.11.

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is not necessary either to establish equal-in-quality interconnection or to enable the collocating carrier to use the features and functionalities of unbundled network elements. *Cf. GTE Service Corp.*, 205 F.3d at 424.

When it responded to the Supreme Court's concerns on remand, the Commission concluded that "a proprietary network element is 'necessary' within the meaning of section 251(d)(2)(A) if, taking into consideration the availability of alternative elements outside the incumbent's network, including self-provisioning by a requesting carrier or acquiring an alternative from a third-party supplier, lack of access to that element would, as a practical, economic, and operational matter, preclude a requesting carrier from providing the services it seeks to offer." *UNE Remand Order* ¶ 44. The Commission found that this standard was consistent with the Supreme Court's decision in *Iowa Utilities Board*, because it "focuses on the competitor's ability to furnish a desired service, and not merely on whether profits are increased by using the incumbent's network." *Id.* ¶ 45.

Moreover, the Commission recognized that, in adopting a national rule, the Commission should determine whether the "necessary" and "impair" standards were satisfied on a *general* basis, rather than on a case-by-case basis. *Id.* ¶¶ 53-55. As the Commission found, "the Act is designed to create a regulatory framework that requires incumbent LECs to make network elements subject to the unbundling obligations of section 251 available to *all* requesting carriers, subject to the requirements of section 251(d)(2), and allows the marketplace to determine ultimately which competitors thrive or survive." *Id.* ¶ 53 (emphasis added). Thus, the Commission rejected incumbent LEC arguments that the "impair" standard would not be satisfied if it could be shown that *some* competitors had found a way to offer service without using the unbundled network element. *Id.* ¶ 54.[6] The Commission properly found that it "cannot

[6] The Commission explained, "[i]n some markets, particularly those markets serving high-volume business customers, it may be practical and economical for competitive LECs to compete using self-provisioned facilities," but that "[i]n other markets, however, typically those markets consisting of residential consumers and small businesses, the delay and costs associated with self-provisioning a network element would preclude those same competitors, or others, from

evaluate the needs of every potential carrier seeking access to each network element on a case-by-case basis" (*id.*), and thus it adopted national rules based on general findings that, absent unbundling, competitors would in many cases be "impaired" or precluded from offering service.

The Commission should apply similar principles in this context. First, it should find that various types of equipment that perform telecommunications functionalities are "necessary" for interconnection or access to unbundled network elements at a minimum if, absent collocation, new entrants' costs of providing service would increase to the point that CLECs would be precluded from providing at least some telecommunications services through interconnection or access to UNEs in at least some areas, or that the CLEC would be precluded from offering service through interconnection or access to UNEs at the same quality as the incumbent. Second, as in the *UNE Remand* proceeding, the Commission should promulgate collocation rules based on findings concerning the conditions facing CLECs generally. Like Section 251(c)(3), Section 251(c)(6) imposes a general duty to provide physical collocation to *all* requesting carriers, subject to the requirements of that section. As in the *UNE Remand Order*, the Commission should find that the fact that some CLECs may be able to establish alternative arrangements in the absence of collocation to offer service in some circumstances "is not dispositive" of whether equipment is "necessary" for interconnection or access to unbundled elements under Section 251(c)(6). *UNE Remand Order* ¶ 54.

This standard is fully consistent with the statute and with the D.C. Circuit's opinion in *GTE Service Corp.*, because it focuses on whether CLECs would be precluded from providing service in some substantial set of circumstances, rather than mere "presumed cost savings" or increased profits. *See GTE Service Corp.*, 205 F.3d at 424; *UNE Remand Order* ¶

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assuming the risk of entry, unless they can purchase unbundled elements from the incumbent."